Claims: -

1. A method for the rapid screening of analytes, comprising the steps of:

a) simultaneously applying a plurality of analytes to be screened onto one or more solid support(s) such that the analytes remain isolated from one another;

b) contacting said analyte-carrying solid support(s) with targets provided in a semi-solid or liquid medium, whereby said analytes are released from the solid support(s) to the targets; and

c) measuring analyte-target interactions.

2. A method according to Claim 1, wherein step (a) comprises (i) disposing the analytes within individually identifiable containers, and (ii) transferring the analytes from the containers to the solid support(s) in such a manner as to maintain the transferred contents of each container separate from those of each other container.

3. A method according to Claim 2, wherein the individually identifiable containers are selected from tubes, including capillary tubes, pens, including plotter pens, and print heads.

4. A method according to Claim 3, wherein the individually identifiable containers are an array of capillary tubes each of which is identifiable according to its position within the array, and wherein transfer of the analytes to the solid support(s) occurs by dispensing thereof through the open ends of the capillary tubes.

5. A method according to any one of Claims 1-4, wherein the solid support is of a substantially flat, disc-, rectangular- or square-shape.

6. A method according to Claim 5, wherein the solid support comprises a material which allows for spontaneous release of the analyte(s) when applied thereto.

7. A method according to Claim 5, wherein the solid support comprises a material which allows for controlled release of the analyte(s) when applied thereto.

8. A method according to Claim 6 or 7, wherein said material is said semi-solid medium.

9. A method according to any preceding claim, wherein when each analyte is applied to the solid support it diffuses thereon so as to produce a concentration gradient.

10. A method according to any preceding claim, wherein the surface of the solid support onto which the analytes are applied is selected from polymers, ceramics, metals, cellulose and glass.

11. A method according to any preceding claim, wherein said semi-solid medium is disposed on a carrier.

12. A method according to Claim 11, wherein the solid support is in the form of a flexible film or tape onto which the target-containing semi-solid medium is applied, whereby the method can be automated using a system of rollers to progress the flexible film or tape through the various steps of the method.

13. A method according to Claim 12, wherein the carrier is covered by a further layer of film or tape and is thereby sandwiched between the solid support and the covering layer.

14. A method according to Claim 12 or 13, wherein the solid support or covering layer (if present) is provided with a track for the recordal of information regarding the applied analytes, whereby the

information can be read and processed simultaneously with the measurement of analyte-target interactions in an automated process.

15. A method according to any one of Claims 1-10, wherein the solid support is itself a detector or forms part of a detector.

16. A method according to Claim 15, wherein the solid support is selected from a SiO_2 wafer, a charge-coupled device, and a photographic film.

17. A method according to any preceding claim, wherein the surface of the solid support is coated with a membrane, a molecular monolayer, a cellular monolayer or a Langmuir-Blodgett film.

18. A method according to any preceding claim, wherein the solid support is itself an information carrier which carries information in electronic, magnetic or digitised form.

19. A method according to any preceding claim, wherein said surface of the solid support is reflective.

20. A method according to Claim 19, when dependent on Claim 17, wherein said surface is the reflective surface of a compact disc.

21. A method according to Claim 20, further comprising the step of copying said compact disc to a writable compact disc.

22. A method according to any preceding claim, wherein the semi-solid medium comprises a substance which provides a semi-solid or viscous liquid environment allowing controlled release of said anlaytes to said target.

23. A method according to Claim 22, wherein said substance is selected from gelatin, polysaccharides such as agar and agarose, and

polymers such as methylcellulose and polyacrylamide or a so-called intelligent material.

24. A method according to any preceding claim, wherein steps a) and b) are carried out simultaneously.

25. A method according to Claim 1, wherein each analyte is applied to a single solid support.

26. A method according to Claim 25, wherein the solid support is of a rod shape or a spherical shape.

27. A method according to Claim 25 or 26, wherein each analyte-bearing solid support is contacted in step b) with a target in a separate compartment of a multi-compartmented apparatus.

28. A method according to Claim 27, wherein said compartments are an arrangement of mini-wells in said apparatus.

29. A method according to any preceding claim, wherein the analytes are selected from chemical compounds, antigens, antibodies, DNA-probes, cells and beads and liposomes carrying an analyte of interest.

30. A method according to Claim 29, wherein the analytes, when applied to the solid support, are dissolved in an organic or inorganic solvent.

31. A method according to Claim 30, wherein the solvent includes a so-called intelligent material responsive to a chemical or physical parameter such that each analyte following application to the solid support and drying liquifies in response to said chemical or physical parameter.

32. A method according to any one of Claims 29-31, wherein the analyte is a chemical compound.

33. A method according to any preceding claim, wherein said targets are selected from prokaryotic cells, eukaryotic cells, viruses, molecules, receptors, beads, and combinations thereof.

34. A method according to Claim 33, wherein the targets are cells equipped with reporter functions.

35. A method according to Claim 34, wherein said analyte-target interactions are measurable by the effects of the analytes on the reporter functions of the cells.

36. A method according to any preceding claim, wherein said analyte-target interactions are measured using one or more of the following methods: microscopic, colorimetric, fluorometric, luminometric, densitometric, isotopic, and physical measurements.

37. A method according to Claim 1, substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

38. A method according to Claim 1, substantially as hereinbefore described with reference to the accompanying Examples.